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December 15, 2017

Via Electronic Filing and UPS

Walter L. Thomas, Jr., Secretary
Alabama Public Service Commission
RSA Union Building
100 North Union Street, Suite 950
Montgomery, AL 36104



**Re: Comments on Commission's Jurisdiction Over Electric Vehicle Charging
Stations, Docket No. 32694**

Dear Mr. Thomas:

Enclosed please find the Southern Environmental Law Center's comments on the
above-referenced matter.

Sincerely,


Keith Johnston
Southern Environmental Law Center

Enclosure
KAJ/mmp

**BEFORE THE
ALABAMA PUBLIC SERVICE COMMISSION
MONTGOMERY, ALABAMA**

**Generic Proceeding to Determine the
Commission's Jurisdiction Over
Electric Vehicle Charging Stations**

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Docket No. 32694

**COMMENTS ON COMMISSION'S JURISDICTION OVER
ELECTRIC VEHICLE CHARGING STATIONS**

I. INTRODUCTION

The Southern Environmental Law Center, Energy Alabama and Gasp appreciate the opportunity to respond to the Alabama Public Service Commission's ("Commission") order seeking comments on jurisdictional and deployment scenarios associated with electric vehicle charging stations (EVCS). The electrification of our transportation sector comes with significant potential benefits for electric utilities and consumers in Alabama. For these reasons, which we discuss in detail below, we strongly support the transition to an electrified transportation sector, and respectfully encourage the Commission to do what it can to reduce barriers to electric vehicle adoption and ownership in the state. We believe that the Commission has a role to play in ensuring that this transition occurs in a way that maximizes benefits to the electric system and to the people of Alabama.

Our comments discuss the potential growth of the electric transportation sector and the projected benefits for electric utilities, their customers and the State of Alabama. We then respond to the legal and policy questions posed by the Commission regarding its jurisdiction over non-utility entities that offer electric vehicle charging services in Alabama. Next, we offer

recommendations for how the Commission should treat proposed charging infrastructure investments by regulated utilities. Lastly, we discuss the central role of the Commission as the regulator over Alabama Power's rate-setting for electric vehicles and charging services, which will be critical to ensuring that the benefits of this transition are maximized.

We hope that these comments prove helpful to the Commission as it weighs these important issues, and welcome the opportunity for further engagement with the Commission and other interested parties going forward.

II. ANTICIPATED BENEFITS OF TRANSITIONING TO ELECTRIC TRANSPORTATION

As the Commission notes in its order, EV ownership is growing, increasing the need for EV charging infrastructure. Today, there are 600,000 electric vehicles ("EVs") in the United States.¹ EV sales rose by 37 percent in 2016 and have more than tripled in four years.² This trajectory appears to be increasing at significant rates — EV sales in the United States grew 45 percent over the year ending June 2017.³

Experts agree that this market will continue to grow. Conservative estimates include UBS's projection that EV sales will reach three percent of the U.S. car market in 2025, representing a four-fold increase from today.⁴ The U.S. Energy Information Administration's ("EIA") Annual Energy Outlook for 2017 projects a nine percent share of all projected sales of

¹ NATURAL RESOURCES DEFENSE COUNCIL, ISSUE BRIEF: GUIDING PRINCIPLES FOR UTILITY PROGRAMS TO ACCELERATE TRANSPORTATION ELECTRIFICATION (Aug. 2017), at 1.

² CITIZENS UTILITY BOARD, THE ABC'S OF EVs, https://citizensutilityboard.org/wp-content/uploads/2017/04/2017_The-ABCs-of-EVs-Report.pdf.

³ Rissman, Jeffrey, *The Future of Electric Vehicles in the U.S., Part 1: 65%-75% New Light-Duty Vehicle Sales by 2050*, FORBES (Sept. 14, 2017), <https://www.forbes.com/sites/energyinnovation/2017/09/14/the-future-of-electric-vehicles-in-the-u-s-part-1-65-75-new-light-duty-vehicle-sales-by-2050/#465ccea8e289>.

⁴ *Supra* note 2, at 2.

light-duty vehicles by 2025.⁵ Goldman Sachs predicts that EVs will make up 22 percent of car sales by that same time.⁶ Predictions about the long term sales of EVs show that they could make up 35% - 65% of sales by 2050, with higher percentages if oil prices increase and/or technology costs decrease.⁷

EV benefits accrue to multiple parties, creating the possibility for a win-win-win for consumers, utilities and public health. Consumers will see a decrease in transportation costs, utilities will open new revenue streams, and citizens will reap the public health benefits of less pollution in the air. In addition, the transition to electric transportation increases the country's energy independence and strengthens Alabama's burgeoning car industry. A report by Ceres analyzed the cumulative benefits of anticipated EV adoption, using modest EIA projections by 2035, across 12 utility service territories.⁸ The report found over \$10 billion in net benefits, with 22 percent of these benefits going to EV owners as savings in vehicle operating costs, compared to owning gasoline vehicles; 36 percent accruing to utility customers as savings on electric bills, due to net revenue from selling electricity for EV charging; and 42 percent of benefits accruing to society at large due to environmental improvements.⁹

A. Benefits to Consumers Purchasing EVs

A recent study of 57 cities across the United States showed that electric vehicles are highly efficient and cost-effective. A typical electric vehicle can travel 43 miles for \$1 worth of

⁵ U.S. ENERGY INFORMATION ADMINISTRATION, ANNUAL ENERGY OUTLOOK 2017 (Jan. 5, 2017), [https://www.eia.gov/outlooks/aeo/pdf/0383\(2017\).pdf](https://www.eia.gov/outlooks/aeo/pdf/0383(2017).pdf).

⁶ *Supra* note 2 at 2.

⁷ *Id.* See also, Rissman, Jeffrey, THE FUTURE OF ELECTRIC VEHICLES IN THE U.S., ENERGY INNOVATION (Sept. 2017), http://energyinnovation.org/wp-content/uploads/2017/09/2017-09-13-Future-of-EVs-Research-Note_FINAL.pdf at 3.

⁸ One of the 12 utilities analyzed in the Ceres report was Georgia Power.

⁹ CERES, ACCELERATING INVESTMENT IN ELECTRIC VEHICLE CHARGING INFRASTRUCTURE, at 6 (Nov. 2017), https://www.ceres.org/sites/default/files/reports/2017-12/Ceres_PEVinfraAnalysis_120617.pdf.

electricity, which is about one fourth of the fuel cost of typical 2016 gasoline-powered cars and SUVs.¹⁰ Electricity costs for charging an EV range from \$.05 per kWh to \$.41 per kWh, which translates into a charging cost ranging from a low of \$0.43 per gallon equivalent to a high of \$3.34 per gallon equivalent, with a median of \$0.90 per gallon equivalent.¹¹ Taking the median of this range of charging costs, the typical EV driver could save more than \$770 per year compared to the cost of driving a gasoline vehicle.¹² The study found that across all 57 cities, annual savings in each city exceeded \$440. The U.S. Department of Energy (“DOE”) calculates that in Alabama, consumers will pay \$1.19/eGallon (the equivalent of a gallon for electric charging purposes) versus \$2.26/gallon for gasoline.¹³ Charging on a time of use rate can reduce the cost to charge an EV even further, due to the reduced charging costs during off-peak hours.¹⁴ In addition, federal and state income tax credits further reduce the consumer’s cost of purchasing an electric vehicle.

Further savings for consumers come from routine operation and maintenance of electric vehicles. Since battery electric vehicles do not have a gasoline engine, consumers do not have the normal expenses associated with gasoline powered engines (such as regular oil changes). According to the American Automobile Association, the average EV owner will save \$2,100 over a medium-sized, gasoline-powered sedan just on maintenance costs and repairs when driven 150,000 miles.¹⁵

¹⁰ *Going from Pump to Plug*, UNION OF CONCERNED SCIENTISTS (Nov. 2017), <https://www.ucsusa.org/sites/default/files/attach/2017/11/cv-report-ev-savings.pdf>.

¹¹ *Id.*

¹² *Id.*

¹³ See *eGallon*, U.S. DEPARTMENT OF ENERGY, <https://energy.gov/maps/egallon> (last visited Dec. 6, 2017).

¹⁴ *Id.*

¹⁵ *Supra* note 10.

B. Benefits to Electric Utilities and Their Customers

Utilities know the significant opportunity afforded by the electrification of transportation. A report by the Electric Power Research Institute (“EPRI”) in 2016 found that “[t]ransportation electrification **represents the single most significant opportunity to address the utility need for growth and long-term sustainability**” due to several factors, including that EV infrastructure leverages the existing utility system and can be installed incrementally as needed.¹⁶ A recent survey of utility professionals showed that the majority of respondents are pursuing EV infrastructure deployment as a new revenue opportunity.¹⁷ We are also beginning to see Southeast utilities invest in EV charging. For example, Southern Company invested in an EV charging firm this past summer,¹⁸ and just recently joined a utility and EV firm alliance for transportation electrification, which intends to work with utility regulators to “allow utility ownership and facilitation of these assets based on appropriate rules.”¹⁹

Utilities can capture the incremental revenue from additional electricity that EV drivers purchase at home—which is where 80 percent of the charging takes place.²⁰ Researchers at the Pacific Northwest National Laboratory have found that there is sufficient spare capacity in the nation’s grid to power nearly all of our passenger cars and trucks, if vehicle charging is properly

¹⁶ ELECTRIC POWER RESEARCH INSTITUTE, THE VALUE OF TRANSPORTATION ELECTRIFICATION: THREE PRELIMINARY CASE STUDIES OF IMPACTS ON UTILITY STAKEHOLDERS (May 2016), <http://www.chargevc.org/wp-content/uploads/2016/10/6-EPRI%20-%20The%20Value%20of%20Transportation%20Electrification.pdf> (emphasis added).

¹⁷ UTILITY DIVE, 2016 STATE OF THE ELECTRIC UTILITY SURVEY, at 11.

¹⁸ Clancy, Heather, *Utility Coalition Invests in EV Charging Firm Greenlots*, GREENBIZ (July 25, 2017), <https://www.greenbiz.com/article/utility-coalition-invests-ev-charging-firm-greenlots>.

¹⁹ Bebon, Joseph, *Utilities and EV Firms Launch Alliance for Transportation Electrification*, NGT NEWS (Nov. 14, 2017), <https://ngtnews.com/utilities-ev-firms-launch-alliance-transportation-electrification>.

²⁰ Committee on Overcoming Barriers to Electric-Vehicle Deployment et al., *Overcoming Barriers to Deployment of Plug-In Electric Vehicles* (Washington, D.C.: NATIONAL ACADEMIES PRESS, 2015).

managed.²¹ This means that a utility's revenues can be increased without a commensurate increase in grid costs, which can put downward pressure on customers' rates. For example, a recent California analysis projected net revenues of \$2 billion to \$8 billion for utilities due to the transition to EVs, sufficient to justify investments in charging infrastructure and to lower customer bills.²²

To harness these savings, utilities must incentivize EV charging during times when there is spare grid capacity, which avoids the need for new capital investments and expensive peak power costs.²³ This new load must be managed to avoid unexpected system impacts due to demand. One electric vehicle charge can be comparable to the load of an entire home.²⁴ In California, where over half of all EVs in the U.S. are located, time-of-use ("TOU") rates have been very effective at encouraging off-peak charging.²⁵ When EV customers are on TOU rates that shift demand to off-peak times, the cost of EVs on distribution systems is only \$10 per vehicle. In sum, when utilities manage properly for EV load, there is the potential for downward pressure on rates and increased revenue for utilities.

C. Benefits to the Public

Significant public health benefits accrue as the transportation sector evolves to electrification. Alabama Power has touted the environmental benefits of EVs: "On-road and non-road electric vehicle and equipment vehicles and equipment are clean, efficient, economical,

²¹ Kintner-Meyer, M., K. Schneider, & R. Pratt, *Impacts Assessment of Plug-In Hybrid Vehicles on Electric Utilities and Regional U.S. Power Grids*, PACIFIC NORTHWEST NATIONAL LABORATORY (Nov. 2007), www.energyenvironment.pnnl.gov/ei/pdf/PHEV_Feasibility_Analysis_Part1.pdf.

²² ENERGY AND ENVIRONMENTAL ECONOMICS (E3), CALIFORNIA TRANSPORTATION ELECTRIFICATION ASSESSMENT, PHASE 2: GRID IMPACTS, CALIFORNIA ELECTRIC TRANSPORTATION COALITION (Oct. 23, 2014), www.caletc.com/wp-content/uploads/2014/10/CalETC_TEA_Phase_2_Final_10-23-14.pdf.

²³ See Baumhefner, M., R. Hwang & P. Bull, *Driving Out Pollution: How Utilities Can Accelerate the Market for Electric Vehicles*, NATURAL RESOURCES DEFENSE COUNCIL (June 2016), at 6.

²⁴ *Id.* at 14.

²⁵ Allison, A. & M. Whited, *Electric Vehicles Are Not Crashing the Grid: Lessons from California*, SYNAPSE ENERGY ECONOMICS, INC. (Nov. 2017), at 1.

and quiet, create U.S. jobs and contribute to energy independence.”²⁶ In addition, the company has noted that plug-in vehicles will get cleaner over time as the generation of electricity gets cleaner, while gas or diesel engines deteriorate over time and will have higher emission levels.²⁷ The transportation sector contributes over 50 percent of total nitrogen oxide emissions in the United States, over 30 percent of volatile organic compound emissions, and over 20 percent of particulate matter emissions.²⁸ These pollutants can cause respiratory problems, cancer, and chronic obstructive pulmonary disease.²⁹ Although air quality has improved, soot and smog have been perennial problems in some parts of the state, such as Birmingham and other metropolitan areas. Electrification of mobile sources of air pollution will vastly improve air quality in these areas.³⁰

III. LEGAL QUESTIONS PRESENTED BY ELECTRIC VEHICLE CHARGING STATIONS

Alabama law is clear that an entity owning and/or operating an electric vehicle charging station would not be subject to Title 37 by this act alone.

It is important to note that the majority of EV charging occurs at the EV owner’s home.³¹ EV charging occurs **in the same manner, as far as impacts to the electrical grid are concerned**, whether the EV is at home or at a public location served by a third party company.

²⁶ *Why We Advocate*, ALABAMA POWER, <http://www.alabamapower.com/our-company/the-environment/electric-transportation/why-we-advocate.html> (last visited Dec. 7, 2017).

²⁷ *Electric Transportation*, ALABAMA POWER, <https://www.alabamapower.com/our-company/the-environment/electric-transportation/environment-and-the-grid.html> (last visited Dec. 7, 2017).

²⁸ *Smog, Soot, and Other Air Pollution from Transportation*, ENVIRONMENTAL PROTECTION AGENCY, <https://www.epa.gov/air-pollution-transportation/smog-soot-and-local-air-pollution> (last visited Dec. 6, 2017).

²⁹ *How Mobile Source Pollutions Affects Your Health*, ENVIRONMENTAL PROTECTION AGENCY, <https://www.epa.gov/mobile-source-pollution/how-mobile-source-pollution-affects-your-health> (last visited Dec. 6, 2017).

³⁰ See, e.g., AMERICAN LUNG ASSOCIATION, STATE OF THE AIR 2017, <http://www.lung.org/assets/documents/healthy-air/state-of-the-air/state-of-the-air-2017.pdf>.

³¹ *Charging at Home*, OFFICE OF ENERGY EFFICIENCY & RENEWABLE ENERGY, U.S. DEPARTMENT OF ENERGY, <https://energy.gov/eere/electricvehicles/charging-home> (last visited Dec. 7, 2017).

The sole difference is that when it occurs in public, there may be an additional transaction between the third party and the EV owner (in situations where isn't being offered free of charge); but in both situations, an individual (whether the EV owner or EV charging company) is purchasing electricity from a regulated utility in order to charge an EV battery. In each transaction, that regulated utility sells electricity at rates that are approved by this Commission.³²

When independent charging companies operate in Alabama, they are purchasing electricity as customers of public utilities, then offering limited services to a set of customers for the sole purpose of charging an EV. This secondary transaction between an EV charging company and an EV owner can take several forms, as the Commission has noted (including employers offering EV charging equipment use to employees, but not to the public generally; public parking garage owners installing charging facilities to customers who pay to park, as an incidental service at no additional cost; and a retail chain installing EVCS and imposing a rate based on "cents/kWh" for use of the equipment by the public).

A thorough analysis of Alabama statutes and case law reveals that under all of the above scenarios, subjecting these companies to regulation as a public utility would not make sense. EV charging stations do not constitute a plant, property or facility for the generation, transmission or distribution, sale or furnishing of electricity; rather, these companies are offering a discrete and limited charging service. Nor do EV charging companies provide electricity "to or for the public" – on the contrary, they serve a very limited set of customers. For these reasons, after similar inquiries, sixteen states have proactively adopted policies to clarify that EV charging activities do not subject independent, non-utility companies to the jurisdiction of state utility

³² Note that municipally owned utilities and electric cooperatives are self-regulated, and therefore not subject to Commission jurisdiction over rates.

regulators.³³ We are not aware of any regulator that has established jurisdiction over non-utility EVCS companies based on a finding that these entities are acting as utilities.

Before discussing Alabama's statutory standards, here is a snapshot of several states' inquiries into this question:

- **Missouri**: The Missouri Commission found that it lacked jurisdiction over EV charging services. The Commission found that EV chargers do not constitute an "electric plant" under Missouri law, because they are not used for furnishing electricity for light, heat or power; rather, the charging service is the product being sold, *not electricity*.³⁴ "To rule otherwise would conceivably assert jurisdiction over other similar battery-charging services, such as smart phone charging stations or kiosks, RV parks that allow vehicles to connect to the park's electricity supply, or airports that connect planes to a hangar's electricity supply while parked, which the Missouri General Assembly could not have intended."
- **New York**: The New York Public Service Commission issued a declaratory ruling in 2013 determining that it does not have jurisdiction over charging stations or owners/operators of charging stations, so long as the owners/operators do not otherwise fall within the definition of an electric corporation.³⁵ The Commission found that EVCS are not used for the generation, transmission or distribution, sale or furnishing of electricity for light heat or power. Instead, this equipment is utilized to provide charging services that allow the customer "to do only one thing, charge a PEV's battery ... While the customer is using electricity, this is incidental to the transaction."³⁶ The Commission

³³*Supra* note 20 at 14.

also found that the use of a per-kWh price will not confer jurisdiction where none otherwise exists.

- **Massachusetts:** The Department of Public Utilities issued an order in 2014 finding that owners and operators of electric vehicle supply equipment are not subject to the Department's jurisdiction under the state's statutory structure either as distribution companies, electric companies, or otherwise.³⁷ The Department rested its finding on the fact that this equipment does not utilize "lines" to deliver electricity; does not transmit electricity over those lines; and the equipment only allows for one limited purpose – to allow a customer to charge an EV battery. Based on the above, the Department made a distinction between the provision of EV charging "services" and the sale of electricity.

A. EV charging stations are not subject to regulation under Title 37

The central legal question is whether an EV charging company should be regulated as a utility, which would trigger regulation by the Alabama Public Service Commission. *See* Ala. Code 37-1-32. Title 37 of the Alabama Code, pertaining to Public Utilities and Public Transportation, determines the Commission's authority. To be regulated as a utility is no small matter; it creates a statutory duty for that entity to "render adequate service to the public and ... make such reasonable improvements, extensions and enlargements of its plants, facilities and equipment as may be necessary to meet the growth and demand of the territory which it is under

³⁴ Public Service Commission of the State of Missouri, File No. ET-2016-0246, In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of a Tariff Setting a Rate for Electric Vehicle Charging Stations, Report and Order (April 19, 2017).

³⁵ New York Public Service Commission, Case 13-E-0199, Declaratory Ruling on Jurisdiction Over Publicly Available Electric Vehicle Charging Stations (Nov. 22, 2013).

³⁶ *Id.* at 4.

³⁷ Commonwealth of Massachusetts, Department of Public Utilities, D.P.U. 13-182-A, Order on Department Jurisdiction over Electric Vehicles, the Role of Distribution Companies in Electric Vehicle Charging and other Matters (Aug. 4, 2014).

the duty to serve.” Ala. Code 37-1-49. It also authorizes utilities to receive a fair return on the value of its property devoted to the public service. *Id.* at 37-1-80.

The statute defines a “utility” as:

“Every person, not engaged solely in interstate business, that now or may hereafter own, operate, lease, or control . . . [a]ny plant, property, or facility for the generation, transmission or distribution, sale or furnishing to or for the public of electricity for light, heat, or power, or other uses, including any conduits, ducts, or other devices, materials, apparatus, or property for containing, holding, or carrying conductors used or to be used for the transmission of electricity for light, heat, or power, or other uses.”

Ala. Code § 37-4-1(7)(a). Our comments discuss this definition in detail, and conclude that independent EV charging companies do not fall within this statutory definition.

1. *EV charging services do not constitute a plant, property or facility for the generation, transmission or distribution, sale or furnishing of electricity.*

As noted earlier, EV charging companies are not in the business of generating electricity. Rather, they purchase electricity just like other electric ratepayers from traditional utilities like Alabama Power. Their charging equipment is unable to transmit electricity for any other purpose than to charge an electric car. In that way, they are unable to furnish electricity in the broad sense, as a utility would under this definition.

These companies are also not engaged in the transmission or distribution of electricity. They do not send electricity over a utility’s distribution or transmission systems, nor do they construct their own lines, poles or other transmission equipment. Indeed, the electricity has *already* been sent by a public utility through transmission and distribution lines, where it is then furnished and sold to the charging station owner. This is a critical point, because it speaks to the core rationale of the legislature in granting monopoly powers and obligations to public utilities.

The Legislature authorized monopoly utilities to serve the public in specific territories for the purpose of “avoid[ing] unnecessary duplication of facilities.” Ala. Code §§ 37-14-1, 37-14-30; *see also Mun. Utils. Bd. of Albertville v. Ala. Power Co.*, 934 F.2d 1493, 1496–97 (11th Cir. 1991) (The legislature passed the Service Territories for Electric Suppliers Act for the purpose of “limiting wasteful line duplication”).³⁸

This goal – to avoid the wasteful duplication of transmission and distribution lines and facilities – does not apply to companies that are offering charging services to customers who frequent their on-site charging locations. In contrast, this charging equipment is installed on specific premises with no construction of distribution lines or other facilities. The legislative intent in adopting Title 37 would in no way be served by imposing jurisdiction on EV charging companies.

2. *EV charging companies are not providing electricity “to or for the public.”*

EVCS companies are not selling or furnishing electricity to the public – rather, they are offering a very limited EV charging service to a limited set of customers. Alabama law and the courts have been clear that, even when delivering a product resembling what is provided by public utilities, entities that do not hold themselves out as providing services “to or for the public” do not trigger the regulatory authority of the state. Ala. Code § 37-4-1(7)(a). The Alabama Supreme Court has clearly stated, in multiple cases, that “not all purveyors of energy commodities are ‘public’ utilities, even though they sell and distribute their products under statutory regulation” -- rather, it must hold itself out as ready, able and willing to furnish an

³⁸ In the same way that EV charging companies fall outside the definition of “utility” found in Title 37, they similarly do not fall within the definition of “electric supplier” found in Title 37. It is defined as “[a]ny municipality, municipally-owned utility or other governmental entity, any cooperative, corporation, person, firm, association or other entity engaged in the business of supplying electric service at retail.” Ala. Code § 37-14-2.

essential service to the public on a non-discriminatory basis. *Coastal States Gas Transmission Co. v. Ala. Pub. Serv. Comm'n*, 524 So. 2d 357, 360-62 (Ala. 1988); *see also Ala. Power Co. v. Cullman Cty. Elec. Membership Co.*, 174 So. 866, 871 (1937) (finding that a cooperative utility would not be considered a public utility unless and until it held itself out as a public utility); *S. Liquid Gas Co. v. City of Dothan*, 44 So. 2d 744, 747 (1950) (finding that a natural gas distribution company was not a public utility because it lacked the “essential element” for regulation – “both serving and [being] constituted to serve all the inhabitants in the area who comply with reasonable conditions”).

Similar to the cases referenced above, EV charging companies do not hold themselves out to the public as a utility that is ready and willing to serve any or all of their electricity needs, or even all of their EV charging needs. Nor do these companies claim a monopoly over the provision of utility services (or even charging services) in any specific geographic territory. These companies in no way take on the obligation to provide electricity to the public in the broad sense. They do not attempt to offer essential electricity services to the public, or even to provide 100 percent of a single customer’s electricity needs; rather, they are in the business of offering a limited EV charging service to a limited set of customers, and they stand prepared to compete in an open marketplace for those customers against other charging companies.

The Commission posed a related question about whether this legal inquiry would be different if a third party generated its own electricity and used such generation for the operation of its publicly available EV charging services. This fact should not impact the relevant question of whether an EV charging company is subject to the Commission’s jurisdiction with respect to its transaction with the EV owner, which is clearly a non-regulated transaction for the reasons discussed above. Rather, any self-generation of electricity by the EVCS would pertain to the

primary transaction between the EV charging station and the electric utility. The self-generation of electricity by customers of Alabama Power is already regulated by the Commission, through its review of rates and interconnection terms. If an EV charging company is complying with the terms and conditions required by the Commission for self-generating customers, then the fact that some self-generated electrons may or may not pass through to charge customers' EVs is of no consequence. This would be similar to a laundromat lawfully installing a small on-site generator behind its meter, and using that to power its washing machines that serve customers. The fact that some of these electrons may be powering washing machines would not be a logical reason to extend the Commission's jurisdiction over laundromats. The regulatory burdens and hurdles created by regulation of these transactions would not serve the public interest, and therefore these free market transactions should not be subject to Commission jurisdiction. The self-generation of some power needs by an EV charging company does not alter the nature of its competitive transactions with customers, nor require it to be regulated under Title 37.

For these reasons, retaining these entities' non-regulated status is appropriate in each of the specific transactions that the Commission discusses, whether the transaction is semi-public (such as a charging service offered to a company's employees) or available to all members of the public, and whether the transaction is structured as a payment by the minute or per kilowatt hour. In fact, it is particularly important that the Commission makes clear that companies are able to charge customers on a "per kWh" basis. This is because different EVs charge at different speeds, so it benefits consumers to clarify that companies can charge in a way that most closely reflects the amount of "charge" that a car has received. In conclusion, we respectfully request that the Commission issue a clear statement of non-jurisdiction over these independent charging companies, regardless of how they structure the transaction with EV customers.

B. The Role of Consumer Protection Laws

EV charging is a relatively novel business in the state of Alabama, so some understandable concern can arise over whether consumers in the state will be adequately protected in their dealings with these independent companies. Other states have wrestled with this as well. For instance, the Massachusetts Department of Public Utilities, while declining to extend jurisdiction over EV charging services for itself, noted that there may be a place for appropriate regulation by other government entities, for purposes of public safety and consumer protection.³⁹ The Massachusetts DPU concluded that appropriate avenues for this regulation already existed, such as through consumer protection authority.

In Alabama, there is already a process in place for impacted consumers to seek redress for harms related to retail transactions. Injured consumers can file a complaint with the Office of the Attorney General in the state's Consumer Interest Division by filling out a form online, or by calling the consumer hotline. The Consumer Interest Division serves as a mediator of consumers' complaints that relate to retail transactions.⁴⁰ Building codes have also been used to regulate electric vehicle charging equipment in other states; these codes are set by the State of Alabama Building Commission.⁴¹

IV. REGULATED UTILITY INVESTMENTS IN EV CHARGING INFRASTRUCTURE

The Commission has also sought comments on how it should treat EV charging investments that are proposed by utilities already subject to Title 37. Utilities have an important

³⁹ Commonwealth of Massachusetts, Department of Public Utilities, D.P.U. 13-182-A, Order on Department Jurisdiction over Electric Vehicles, the Role of Distribution Companies in Electric Vehicle Charging and other Matters (Aug. 4, 2014), at 9.

⁴⁰ *Consumer Interest Division*, STATE OF ALABAMA OFFICE OF THE ATTORNEY GENERAL, <https://ago.state.al.us/legacy/Page-Consumer-Protection> (last visited Dec. 7, 2017).

⁴¹ STATE OF ALABAMA BUILDING COMMISSION, <http://bc.alabama.gov/buildingcode.htm> (last visited Dec. 7, 2017).

role to play in supporting emerging EV markets through their investments, and we encourage the Commission to adopt clear guidelines for regulated utilities that may be interested in doing so. Through its current regulatory authority, the Commission can ensure that any investments made provide benefits to all ratepayers, thus warranting treatment as rate-based assets. We also encourage the Commission's consideration of how these investments can best preserve the competitive nature of the EV charging market and leverage the free market to bring down costs for consumers.

A. Standards for Utility Investments

Alabama law mandates that “[e]very utility shall render adequate service to the public and shall make such reasonable improvements, extensions and enlargements of its plants, facilities and equipment as may be necessary to meet the growth and demand of the territory which it is under the duty to serve.” Ala. Code § 37-1-49.⁴²

The Legislature granted to the Commission the ability to prescribe the “adequate standard of service” to be rendered by a utility. Ala. Code § 37-1-52; *see also id.* § 37-1-32 (giving the Commission supervisory authority over the manner in which utilities’ plants, equipment and other property are owned, leased, controlled, managed, conducted and operated); *id.* § 37-4-28 (describing the process for a utility to obtain a certificate of convenience and necessity from the Commission prior to construction of any rate-based assets); *id.* § 37-1-57 (stating that “[e]very utility, when and as required by the commission, shall file with the commission such annual, or other reports, and such other information as the commission may desire”).

⁴² *See also* Ala. Pub. Serv. Comm’n, General Rules, Rule 3, http://psc.alabama.gov/Administrative/GenRules_01_10_05.pdf.

A central inquiry in determining whether investments are appropriate for utilities to include in rates is whether those investments are “devoted to the public service.” *See, e.g., Ala. Gas Corp. v. Ala. Pub. Serv. Comm’n*, 425 So.2d 430 (Ala. 1982) (stating that the Commission is under no constitutional requirement to use any particular method in establishing rates; but the fair net return allowed must justly compensate the company for the property it “devoted to public service”); *Birmingham Elec. Co. v. Ala. Pub. Serv. Comm’n*, 254 Ala. 140, 47 So.2d 455 (Ala.1949) (“The rate base is the reasonable value of utilities property devoted to the public service.”); *Continental Telephone Co. of the South v. Ala. Pub. Serv. Comm’n*, 427 So.2d 981 (Ala.1982) (“Reasonable rate base consists of reasonable value of its property devoted to public service. All utility property used to serve the public, therefore, is to be included in computing a utility's rate base.”) The Commission can do this by ensuring that utility investments in EV infrastructure provide net benefits to customers and promote EV adoption while still allowing a competitive market to develop.⁴³

It is important to note that we are addressing the discrete situation where a utility is already subject to Title 37 and proposes to make capital investments in EV charging services and infrastructure using funds that will be collected from ratepayers, and are eligible for a fair return. Even if a utility opts not to make such investments, it would still have an important role in the development of the EV market because any charging equipment must connect to the utility’s distribution system. And utilities are also singularly positioned to lead early investments in charging infrastructure due to their access to capital, knowledge of the grid and customers, and incentives for significant increase in revenues.

⁴³ *See* Washington Utilities and Transportation Commission, In the Matter of Amending and Adopting Rules in Docket UE-160799, Policy and Interpretive Statement Concerning Commission Regulation of Electric Vehicle Charging Services (June 14, 2017), at 8.

In direct response to a question posed by this Commission in its order: The deployment of publicly available EV charging services should be considered a competitive market.

However, there is also arguably a strong need for utilities to facilitate the EV marketplace, especially in the near future. Several state regulators have acknowledged that there may be an especially important role for utilities to play during the early years of market development. For example, as the Washington Commission noted in June 2017, “the EV [charging equipment] market is still in an early stage of commercial development in which a variety of approaches – both regulated and non-regulated – are being tested and implemented in state and regional markets today,” warranting some level of flexibility in applying the “used and useful standard.”⁴⁴

There are many ways for utilities to make investments that drive EV adoption, including the following:

- End to end ownership: capital investments with a rate of return for a utility’s distribution grid investments, panels, conductors, all the way down to chargers;
- Make-ready investments that reduce the cost of installing EV charging infrastructure for third party companies by investing in grid upgrades all the way up to but not including the actual chargers;
- Hybrids of the above, including rebates to independent EV charging companies (rebates could be recovered through rates or not). For example, Georgia Power has provided rebates for over 550 Level 2 chargers at commercial and residential locations under its Get Current Program.⁴⁵

⁴⁴ See Washington Utilities and Transportation Commission, In the Matter of Amending and Adopting Rules in Docket UE-160799, Policy and Interpretive Statement Concerning Commission Regulation of Electric Vehicle Charging Services (June 14, 2017), at 12.

⁴⁵ *Supra* note 9 at 8.

The emerging nature of this marketplace makes it even more important for the Commission to give utilities clear guideposts for these investments, such as through the adoption of a standard of review for weighing proposed utility investments in EV charging services. While we welcome the Commission offering general guidance to regulated utilities as part of this proceeding, we also encourage it to independently evaluate any specific proposals due to the variety of approaches that a utility could take. Here are some examples of balancing tests adopted by other jurisdictions:

- The state of Massachusetts requires that utility proposals must meet a need regarding the advancement of EVs in the state that is not likely to be met by the competitive EV charging market; and must not hinder the development of the competitive EV charging market.⁴⁶
- The California Commission also evaluates utility filings on a case-specific basis, using a balancing test to weigh the benefits of utility ownership against competitive harm. This involves an inquiry into whether there are regulatory protections that could mitigate any unfair advantages to the utility.⁴⁷ The Commission requires that proposals for utility ownership of EV charging infrastructure include an analysis of the impact of such ownership on competition.⁴⁸
- The Washington Commission allows utilities to receive an incentive rate of return on investments in electric vehicle charging infrastructure that are reasonably expected, at the

⁴⁶ Commonwealth of Massachusetts, Department of Public Utilities, D.P.U. 13-182-A, Order on Department Jurisdiction over Electric Vehicles, the Role of Distribution Companies in Electric Vehicle Charging and other Matters (Aug. 4, 2014), at 13.

⁴⁷ California PUC, Phase 1 Decision Establishing Policy to Expand the Utilities' Role in Development of Electric Vehicle Infrastructure, D. 14-12-079 (filed July 29, 2010).

⁴⁸ *Id.*, Conclusion of Law 3.

time they are placed in the rate base, to result in “real and tangible benefits for ratepayers.”⁴⁹

- Oregon has adopted a statutory test for the Commission’s review of utility proposals for programs and investments in EV charging infrastructure: the Commission must consider whether a given investment will be prudent; used and useful; reasonably expected to support the electric company’s electrical system; reasonably expected to improve the electric company’s system efficiency and operational flexibility, including integration of variable generating resources; and reasonably expected to stimulate innovation, competition and choice in the vehicle charging and services market.⁵⁰

B. Threats to Competition

Even as it encourages smart investments, the Commission should be vigilant to ensure that a regulated utility’s entry into this competitive market does not adversely impact competitive providers of EV charging services. After all, this would defeat this purpose of the utility investments, which is to help jumpstart a vibrant EV market that will spur additional customer adoption of EVs through the proliferation of a network of charging locations. There is a real risk that utilities could intentionally or unintentionally abuse their competitive advantage due to their name recognition, better understanding of systems, prior relationship with customers, ability to set rates and ability to rate-base investments to decrease costs for charging, thus undercutting competitors.

⁴⁹ See Washington Utilities and Transportation Commission, In the Matter of Amending and Adopting Rules in Docket UE-160799, Policy and Interpretive Statement Concerning Commission Regulation of Electric Vehicle Charging Services (June 14, 2017), at 9.

⁵⁰ S.B. 1547 (2016).

As a threshold inquiry, we encourage the Commission to require utilities to make a showing as to how their investments will be accessible for third party companies, such as through a competitive RFP process. Another way that the Commission can balance these interests is by encouraging utilities to focus on investments that serve the public good, such as expanding low income and underserved communities' access to EVs, focusing investments on visible locations that alleviate consumers' "range anxiety," making investments in customer education and focusing efforts on ways to maximize reductions in system costs.⁵¹ For example, the Commission could express a preference for rate-based EVCS investments in underserved communities, while limiting other investments to "make-ready" efforts that only invest ratepayer funds up to the charging equipment, allowing third party companies to do the rest. Lastly, the Commission can set certain thresholds of EV penetration or approve time-limited pilot programs, after which point it will revisit the need for utility rate-based investments.

V. RATE DESIGN TO MAXIMIZE EV BENEFITS

Finally, the Commission has asked whether there are any other situations or scenarios beyond those presented herein where it has or would have regulatory jurisdiction over EV charging services. The Alabama Commission should clearly retain its jurisdiction over the rates offered by public utilities to the EV owners and EV charging companies that they serve. Utilities have an important role in managing EV charging load, and regulators are charged with ensuring that these rates are in the public interest. For example, even as the New York State Commission determined that it lacks jurisdiction over non-utility charging companies, it also made clear its

⁵¹ See, e.g., Washington Utilities and Transportation Commission, In the Matter of Amending and Adopting Rules in Docket UE-160799, Policy and Interpretive Statement Concerning Commission Regulation of Electric Vehicle Charging Services (June 14, 2017), at 41 (stating that utility portfolios for EV charging services "must include an education and outreach component targeted to potential EV drivers in a utility's service territory.").

intent to maintain continuing jurisdiction over the transactions between electric utilities and the owners of charging stations; this would give it sufficient ability to respond to changes in the market in which these stations operate, as that market evolves.⁵²

As noted by the Washington Commission, management of EV load is “essential to ensure that electric vehicle charging services provide benefits to non-participating customers, and do not undermine utility conservation efforts.”⁵³ This is so important that the Commission went on to surmise that “[i]t would therefore be difficult for a program without demand response or direct load management capabilities to meet the fair, just, and reasonable standard ... utilities must be able to manage EV charging load in a way that increases system utilization, avoids peak capacity costs, and ultimately results in savings to non-participating customers.”⁵⁴

Without sending a price signal to the customer, EV drivers are most likely to charge their cars right when they arrive home from work, which will exacerbate evening peak demand needs. This would mean an increase in the need for expensive peak capacity resources. Time-of-use rates for residential and commercial charging have been proven to work. For example, San Diego Gas and Electric has found that combining time of use rates with education and outreach can push 80 percent of EV charging to “super off-peak” periods.⁵⁵ Rates can also be structured to compensate EV owners for the grid services that they provide, which can drive further adoption by customers.

Thoughtful rate design is also important for public charging, due to the negative impact of demand charges on these services. Commercial electricity customers typically pay demand

⁵² *Id.* at 5.

⁵³ See Washington Utilities and Transportation Commission, In the Matter of Amending and Adopting Rules in Docket UE-160799, Policy and Interpretive Statement Concerning Commission Regulation of Electric Vehicle Charging Services (June 14, 2017), at 35-36.

⁵⁴ *Id.*

⁵⁵ *Supra* note at 10.

charges, which can account for 50 percent or more of their monthly bill.⁵⁶ For commercial customers with fast charging EV infrastructure, demand charges can account for over 90 percent of their electricity costs.⁵⁷ Alabama Power has already taken steps to adopt rates that incentivize EV adoption for both commercial and residential customers. For example, Alabama Power offers a Business Electric Vehicle Time-of-Use (BEVT) rate for electricity purchased to charge EVs used for fleet purposes.⁵⁸ The electricity used for vehicle charging is metered separately from all other electricity use. Alabama Power also offers a Residential EV rate for customers that can verify possession of a qualified EV.⁵⁹ This optional rate allows for a discounted rate during off-peak hours of 9 pm to 5 am.⁶⁰ The company is also looking into developing standards for fast charging.

We recommend that the Commission propose a technical conference or other forum where these rate design questions can be explored further. We encourage the consideration of pilot programs that can help utilities to determine customer charging behavior and demand for EV charging services in Alabama. This kind of forum would also allow for input from other entities across the state that are working on EV adoption, to ensure that resources are being maximized. This will ensure coordination with other governmental and non-governmental

⁵⁶ *Supra* note 9 at 15.

⁵⁷ Rocky Mountain Institute, EVGO Fleet and Tariff Analysis, Phase 1: California (March 2017), https://d231jw5ce53gcq.cloudfront.net/wp-content/uploads/2017/04/eLab_EVgo_Fleet_and_Tariff_Analysis_2017.pdf.

⁵⁸ Rate BEVT Business Electric Vehicle – Time-Of-Use, Alabama Power (By order of the Alabama Public Service Commission dated Oct. 3, 2000 in Informal Docket # U-4226), <https://www.alabamapower.com/content/dam/alabamapower/Rates/BEVT.pdf>.

⁵⁹ *Alternative Fuels Data Center*, U.S. DEPARTMENT OF ENERGY, <https://www.afdc.energy.gov/laws/all?state=AL> (last visited Dec. 7, 2017).

⁶⁰ Rate Rider PEV Plug-In Electric Vehicle (Optional), Alabama Power (By order of the Alabama Public Service Commission dated March 6, 2012 in Docket # U-5055), <http://www.alabamapower.com/content/dam/alabamapower/Rates/pev.pdf>.

entities to integrate utility information into the transportation planning and prioritization process, and ensure smart deployment of infrastructure.

Several governmental and non-governmental entities are working in Alabama to drive EV adoption. For example, between 2017 and 2027 the State of Alabama is expected to receive \$23 million as a result of the 2016 Volkswagen Settlement, some of which can go towards electrification projects such as charging stations.⁶¹ The U.S. Department of Energy's Clean Cities initiative, charged with bolstering public-private partnerships that advance EV technologies, awarded Alabama, Georgia, and South Carolina a \$545,400 grant in 2011 to support community planning for plug-in EVs and charging infrastructure.⁶² The Alabama Department of Transportation is developing a statewide fleet management program to ensure compliance with the state's Green Fleets Policy – a vision for procuring state vehicles based on criteria that includes fuel economy and life cycle costing. The Policy requires that government entities manage and operate their fleets in a way that is energy efficient, minimizes emissions, and reduces petroleum dependency by using specified proven technology identified by a Committee established to implement the policy.⁶³ At the local level, the City of Birmingham owns 10 EV charging stations that are available for public use.⁶⁴ Also, the Birmingham Airport

⁶¹ ALA. DEP'T OF ENV'T. MGMT., 2016 VOLKSWAGEN SETTLEMENT (Feb. 2017), <http://www.adem.state.al.us/misc/VolkswagenSettlementAnnouncement2017.pdf>; Pillion, Dennis, *Alabama to get \$24 million in Volkswagen Settlement to Reduce Diesel Emissions*, AL.COM (Mar. 22, 2017), http://www.al.com/news/index.ssf/2017/03/alabama_volkswagen_settlement.html.

⁶² Frades, Matt, *A Guide to the Lessons Learned from the Clean Cities Community Electric Vehicle Readiness Projects*, U.S. DEPARTMENT OF ENERGY (Jan. 2014), https://www.afdc.energy.gov/uploads/publication/guide_ev_projects.pdf. As part of this grant, grantees spent 18 months assessing the barriers and opportunities for EV deployment in the Southeast region. They found that 57 percent of charging will occur at home and 17 percent will occur at the workplace. They also produced maps of neighborhoods most likely to host EV adopters. See Electric Vehicle Adoption in the Southeast: EVSE Placement Addendum (August 2012), available at http://www.plugginggeorgia.com/pdf/EVSE_Placement_Addendum.pdf.

⁶³ Ala. Code § 41-17A-1 to -6; Ala. Exec. Order No. 38 (Mar. 21, 2013).

⁶⁴ *Efficient Vehicles & Behavior*, AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY, <https://database.aceee.org/city/efficient-vehicles> (last visited Dec. 7, 2017).

Authority has approved plans to install 27 electric charging stations to support ground-service equipment.⁶⁵

VI. CONCLUSION

We appreciate the opportunity to weigh in on these important policy questions, and thank the Commission for its consideration of our comments. We look forward to further engagement with the Commission and other stakeholders on these matters.

Respectfully submitted,



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⁶⁵ BHM Adding Electric Chargers for Ground Support Vehicles, BHM, <http://www.flybirmingham.com/bhm-adding-electric-chargers-for-ground-support-vehicles/> (last visited Dec. 7, 2017).

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